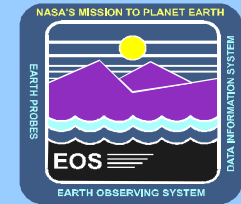






CLS Tools - Comment/Survey Tool (CST)




Netscape: General Survey

 General Survey 

Instruction

All of the questions should be answered using a scale of 1 (strongly disagree) to 5 (strongly agree), with a 3 representing a neutral response or no opinion. We appreciate your time in letting us know how the application can be improved.

 Please complete the survey form and press the **Submit** button before you leave this page. Your comments will not be logged if you navigate out of this page using the Back and/or Forward buttons from the browser. You will receive a confirmation message after your submission.


General Questions

#	Description	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	There was a sufficient amount of metadata and data for me to evaluate EP7.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
2	There was a sufficient variety of data for me to evaluate EP7.	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
3	It was easy to access EP7 using the World Wide Web.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input checked="" type="radio"/> 5
4	My experience using the EP7 WWW version was positive.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input checked="" type="radio"/> 5
5	Links between WWW tools were apparent and accessible.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5
6	I found the EP7 FAQ helpful.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5
7	The EP7 Help Tutorial page was useful.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5
8	I found the Science User Scenario useful.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5
9	I found the EP7 Data Summary tables and graphics helpful.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input checked="" type="radio"/> 5

C

Overall I found EP7 to be very accessible using the web paradigm and a good step towards a fieldable system.

Comments/Suggestions/Comments:

 Please note your comments will not be logged if you navigate out of this page using the Back and/or Forward buttons from the browser. You will receive a confirmation message after your submission.

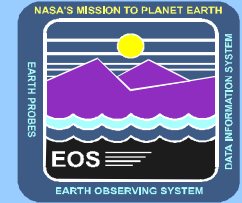
When you have finished, please to submit this survey,

or press to revert to the previous values.

- ◆ HTML Tool
- ◆ Supports user survey capability
- ◆ Designed to support targeted surveys regarding ECS tools
- ◆ Multiple choice and free-text answers
- ◆ Interfaces with MSS server to maintain data
- ◆ Future implementations will integrate a general user feedback function



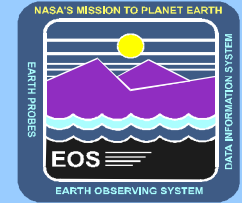
CLS Tools - Subscription Tool (SBT)



- ◆ **Java or HTML tool**
- ◆ **Supports subscription to ECS event (e.g., insertion of a granule)**
 - **Allows user to qualify the subscription to that event (e.g., granule must be part of a certain collection - ShortName=ASTER)**
 - **Allows user to specify action to be taken when event occurs (e.g., acquire the granule)**
- ◆ **Allow user to submit and update subscriptions**
- ◆ **Accessible from any point in the user interface (key mechanism)**



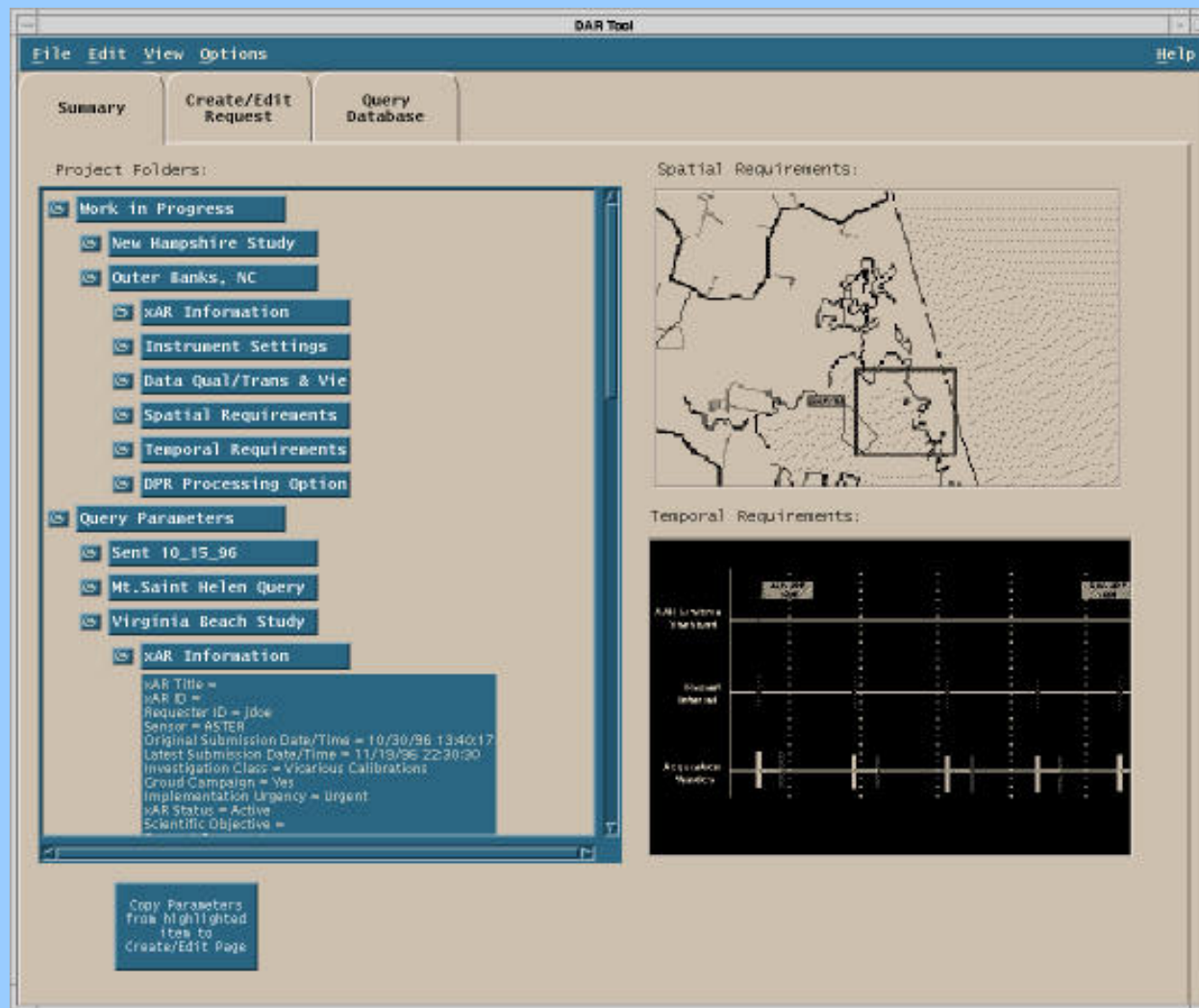
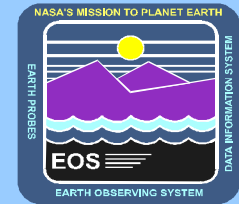
CLS Tools - Session Management Tool (SMT)



- ✦ **Java Tool**
- ✦ **Displays session status to user (progress on requests , etc.)**
- ✦ **A session can be a search or request for any ECS service**
- ✦ **Allows user to suspend and resume session with the ECS service in question**



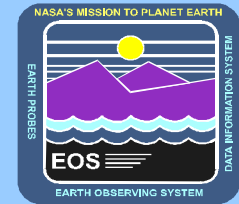
CLS Tools - (ASTER) Data Acquisition Request Tool (DART)



- ✦ X/Motif Tool
- ✦ Supports user's construction of a request to acquire data that the system does not yet contain
- ✦ An ASTER DAR can result in tasking the ASTER instrument
- ✦ Interfaces with the IDG ASTER Ground Data System (GDS) Gateway
- ✦ Allows registered users with the necessary privileges to create DARs and submit them to ASTER



CLS Tools - On-Demand Production Request Tool (DPRT)



On-Demand Processing Options

Base Granule ID:

Available Processing Options:

Product Name	Product Type
Decorrelation Stretch - Thermal IR bands	ASTER Level 2
Decorrelation Stretch - Visible & NIR bands	ASTER Level 2
Digital Elevation Model(DEM) Relative Product	ASTER Level 2
Polar Surface & Cloud Classification	ASTER Level 2
Brightness/Temperature	ASTER Level 2
Surface Emissivity	ASTER Level 2
Surface Emissivity with Fine Cloud Classifier	ASTER Level 2
Surface Kinetic Temperature	ASTER Level 2
Surface Kinetic Temperature with Fine Cloud Classifier	ASTER Level 2
Surface Radiance - Thermal IR Bands with Fine Cloud Classifier	ASTER Level 2
Surface Radiance - Thermal IR Bands without Fine Cloud Classifier	ASTER Level 2
Surface Radiance - Visible & NIR, Short Wave Bands	ASTER Level 2
Surface Reflectance - Visible & NIR, Short Wave Bands	ASTER Level 2

Selected Processing Options:

Processing Options Chosen:	Status
Surface Reflectance - Visible & NIR, Short Wave Bands	default
Decorrelation Stretch - Thermal IR bands	default
Digital Elevation Model(DEM) Relative Product	default

Find:

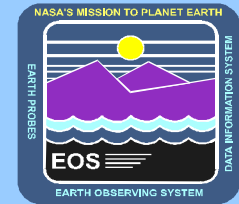
Modify Parameters

OK Reset Cancel Help

- ◆ Java Tool (shown as X/Motif here)
- ◆ Allows user to request higher level processing be done on a specified product
- ◆ Integrated with DAR and the results screen of JEST
- ◆ Two steps
 - Select product
 - Specify product parameters



CLS Tools - On-Demand Production Request Tool cont'd



Digital Elevation Model (DEM) Relative Product

Base Granule ID:

Source of Ground Control Points:

Source Used to Locate Ground Control Points:

Ground Control Point (GCP) Information:

Latitude:
(degrees) (minutes) (seconds)

Longitude:
(degrees) (minutes) (seconds)

Elevation:
(in meters)

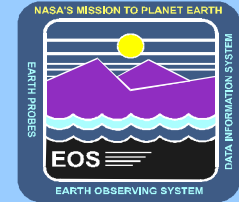
Horizontal Datum: ☐ For areas inside the USA and Canada, use North American Datum of 1983 (NAD83).
☐ For areas outside the USA and Canada, use World Geodetic System of 1984 (WGS84).

Ground Control Points (GCP) Entered:

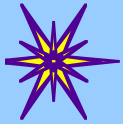
- ◆ Detailed specification based on requested product
- ◆ Screens support user-specified production values



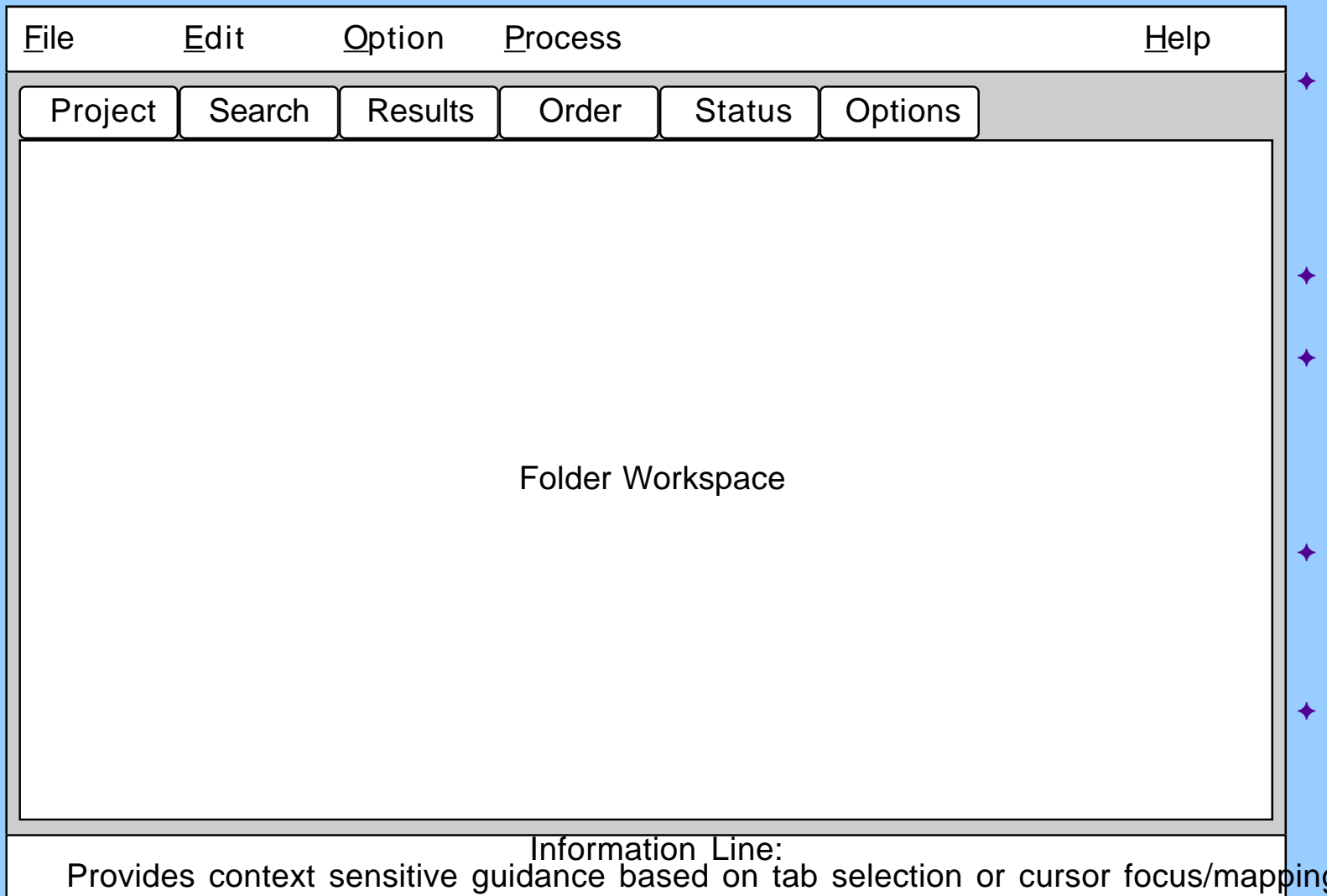
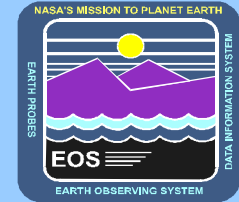
CLS Tools - Java Earth Science Tool (JEST) Prototype (EP7)



- ◆ Original prototype shown here
- ◆ Created to replace the original X/Motif ESST (Earth Science Search Tool)
- ◆ Primary function is to search granule inventory and allow users to invoke services on the inventory results



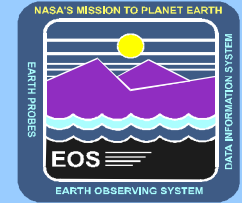
CLS Tools - JEST (Current design)



- ◆ **Folder-based concept designed to fit on 800x600 screen**
- ◆ **Reduces use of dialogs**
- ◆ **More consistent and tightly integrated workflow**
- ◆ **Supports direct and intuitive interaction**
- ◆ **Allows designers to keep good parts of earlier designs**



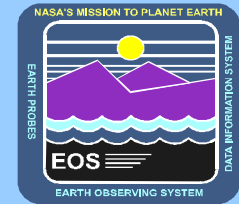
CLS Tools - JEST Function Goals



- ◆ **Primary function is as tool to search inventory granules**
- ◆ **Secondary functionality includes capability as integrated search tool**
 - **Allow different levels of search from a single interface**
 - **Advertising, Guide, Other Documents, Inventory, Production History, QA Stats**
 - **Search results from the varying levels are all displayed with the same format as inventory (table)**
 - **JEST Results user interface will also support the issuing of a second query to a different level given the results**
 - **“Find the guide data for this product advertisement”**
 - **“Find the inventory collection associated with this guide document”**



Functional Flows - Search Screen - Add Discrete (keyword) values



File Edit Option Process Help

Project Folder Create/Edit Search Inspect Results Create/Edit Order Get Status Set Options

Keywords Ranges Spatial Temporal

Attributes

- Spatial...
- Temporal...
- Platform
- Collection
- Topic
- Parameter**
- Processing Lvl
- Site
- Instrument

Values

- Albedo
- Brightness Temperature
- Cloud Type
- Clouds
- Currents
- Earth's Radiation
- Elevation Model
- Fires
- Glaciers
- Ozone
- Precipitation
- Radar
- Radiance
- Surface Vegetation
- Temperature
- Volcanoes**
- Water Vapor

ADD →

Inventory Search 1

▼ Parameter
Volcanoes

Delete Clear All

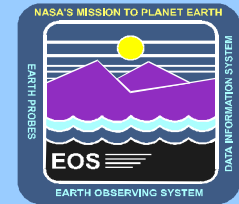
Change Attributes ► Submit Search

Create a search by selecting values for the attributes displayed in the assorted folders. Edit your search by manipulating selected values in the search summary

- Searches are created by selecting values for the desired attributes
- Searches can be qualified by keywords, scale ranges, and spatial and temporal parameters



Functional Flows - Search Screen - Add Range Values



File Edit Option Process Help

Project Folder Create/Edit Search Inspect Results Create/Edit Order Get Status Set Options

Keywords Ranges Spatial Temporal

Attributes

- Cloud Cover
- Cloud Particle Size**
- Day/Night Flag
- NDVI Max
- Water Vapor
- Ozone Concentration
- Ozone Mixing Ratio
- Brightness Temperature
- Sea Surface Temperature

Values

6.0
5.0
4.0
3.0
2.0
1.0
0.1

Low High
Values: 2.2 4.2 microns

ADD →

Inventory Search 1

- ▼ Parameter
Volcanoes
- ▼ Cloud Particle Size
2.2, 4.2

Delete Clear All

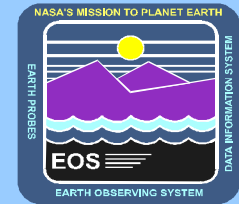
Change Attributes ► Submit Search

Create a search by selecting values for the attributes displayed in the assorted folders. Edit your search by manipulating selected values in the search summary

- ◆ **Product Specific Attributes** are typically selected via a range selector
- ◆ **Process** is the same: select an attribute and the value for it



Functional Flows - Search Screen - Add Spatial values



File Edit Option Process Help

Project Folder Create/Edit Search Inspect Results Create/Edit Order Get Status Set Options

Keywords Ranges Spatial Temporal

Pan/Zoom Reference Map

Zoom 300%

Pan

Reset Stop!

Select Overlays...

Projection Mercator

Shape Rect.

Coordinate System Lat/Lon

Select Region...

Grid On

Top Overlay: Rivers Zoom: 300%

Rectangle: NE: 33.12, -176.19, SW: 77.96, -138.97

Add

Inventory Search 1

▼ Parameter Volcanoes

▼ Cloud Particle Size 2.2, 4.2

▼ Spatial NW: 33.12, -176.19, SE: 77.96, -138.97

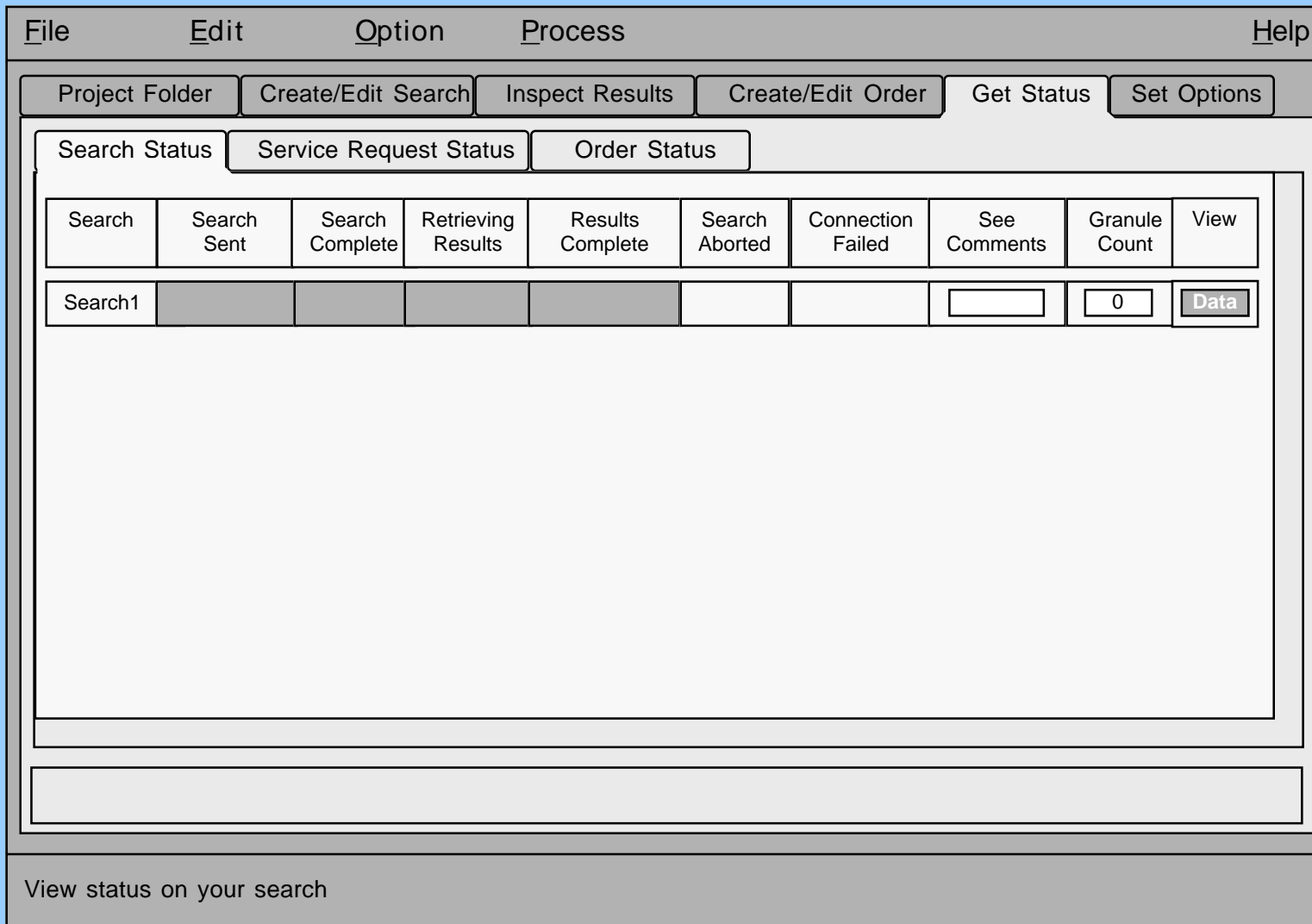
Delete Clear All

Change Attributes Submit Search

Make a spatial selection by clicking and dragging on the map to create a bounding rectangle or polygon.

- ✦ Spatial selection is a specialized case of range selection
- ✦ Specialized features such as pan and zoom are available to assist the user in making spatial selections

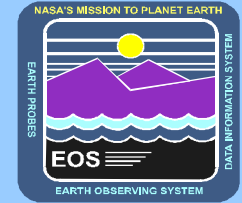
KB-27



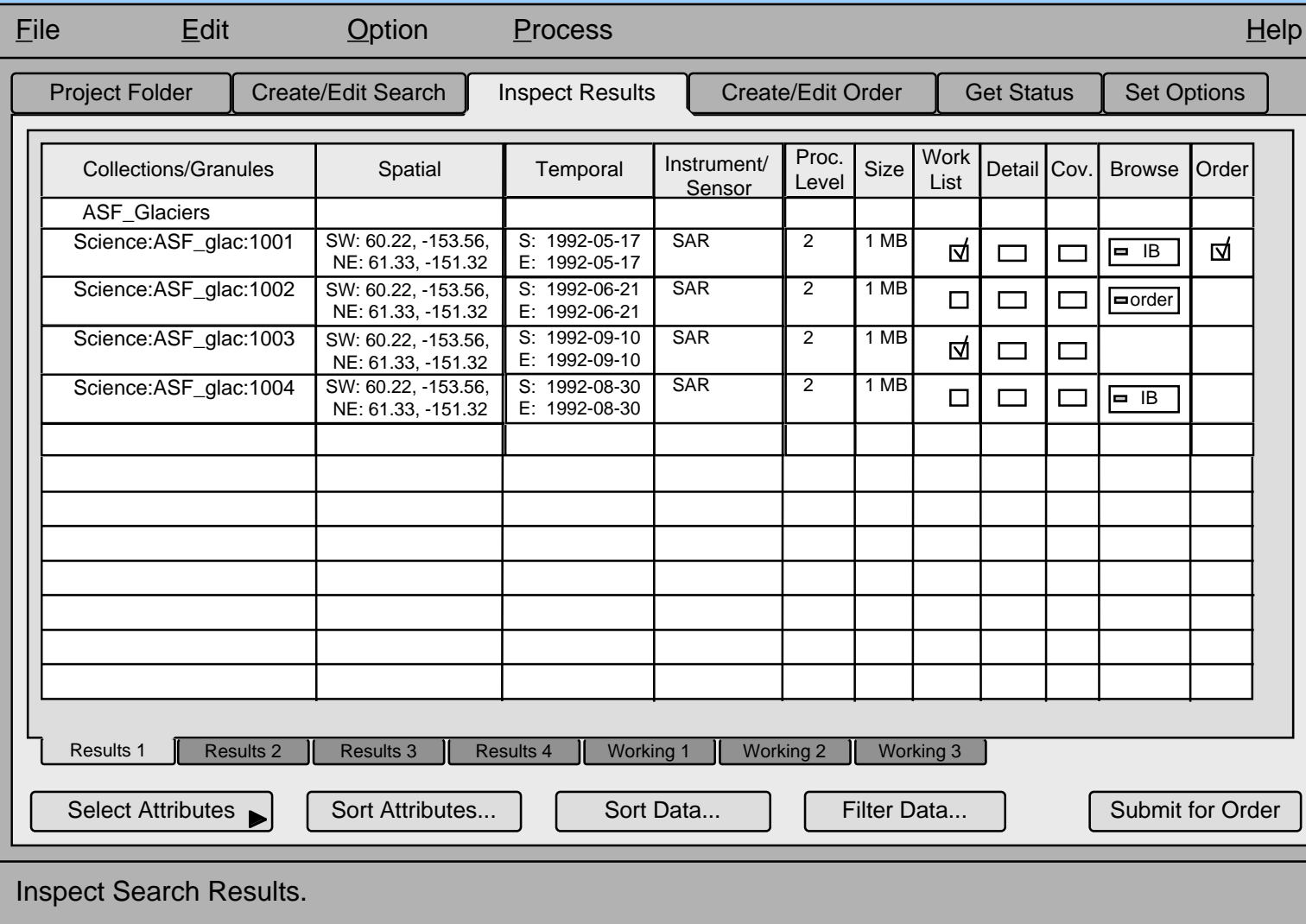
- ✦ Submitted search has a “session” with an ECS service
- ✦ Service is DMS DIM or DSS SDSRV
- ✦ Search session has a status
- ✦ Status screen will eventually become the Session Management Tool



Functional Flow - Search



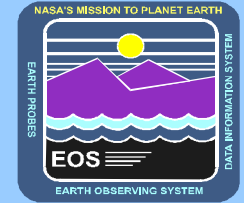
- ✦ **User selects attributes of interest**
- ✦ **User selects values for those attributes**
- ✦ **User submits the search**
- ✦ **Search is submitted to DMS DIM**
- ✦ **DIM routes the search to LIMs at DAACs**
- ✦ **LIMs route the search to data servers or gateways**
- ✦ **Each queried server responds and the responses are routed back to the DIM**
- ✦ **DIM returns results to CLS**
- ✦ **CLS displays results in JEST results screen**



- ◆ **Display results in configurable table format**
- ◆ **Allows manipulation of results set (includes filtering, sorting, and graphically viewing granule coverage)**
- ◆ **Allows selection of services including browse and order**



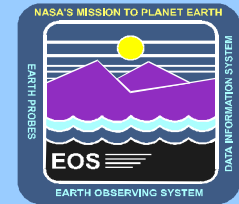
Functional Flow - Browse



- ✦ **User selects browse option from results screen**
- ✦ **CLS creates browse request**
- ✦ **Browse request is sent to the DIM**
- ✦ **DIM routes request to the appropriate LIM or data server**
- ✦ **Browse is streamed to CLS via DIM**
- ✦ **CLS displays file in HDF viewer**



Functional Flow - Order Screen



File Edit Option Process Help

Project Folder Create/Edit Search Inspect Results Create/Edit Order Get Status Set Options

Collections/Granules	Size	Level	Site (DAAC)	Services Selected	Media and Format	Cost
ASF_Glaciers						
Science:ASF_glac:1001	1 MB	2	ASF	Subset	<input type="checkbox"/> CD, HDF, Tar	\$0
Science:ASF_glac:1002	1 MB	2	ASF	Browse Only	<input type="checkbox"/> CD, HDF, Tar	\$0
Science:ASF_glac:1003	1 MB	2	ASF	None	<input type="checkbox"/> CD, HDF, Tar	\$0
Science:ASF_glac:1004	1 MB	2	ASF	None	<input type="checkbox"/> CD, HDF, Tar	\$0

Total Size: MB Account Balance: Other Costs (e.g., S&H):

Available Credit: Estimated Order Cost:

Order 1 Order 2 Order 3 Order 4

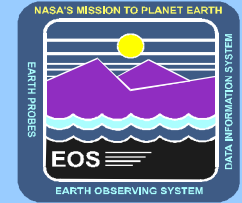
Select Attributes Sort Attr... Sort Data... Filter Data... Compute "What-if"... User Profile... Submit Order...

Prepare Product Order.

- ◆ Part of JEST
- ◆ Used to prepare order
- ◆ Displays selected granules in same configurable table format as results
- ◆ Allows selection of media, distribution options and services (services can be ordered as well)



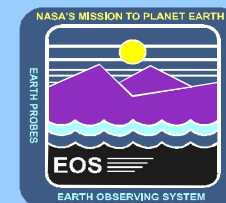
Functional Flow - Order



- ✦ User selects desired granules from the results screen
- ✦ Granules are moved into the order preparation screen
- ✦ User selects media, distribution options and examines price estimate info
- ✦ User submits order
- ✦ Order is shipped to MSS for credit check
- ✦ MSS returns order with credit OK
- ✦ CLS displays a confirmation screen indicating estimated price and shipping time
- ✦ User confirms order
- ✦ Order is shipped to DIM (for processing) and MSS (for tracking)
- ✦ CLS status screen displays status of order
- ✦ When order is complete, DDIST sends notification that order data is available



V0 IMS



Search Screen

Search Screen

Go To Screen Functions Help

For Inventory Search, Minimum Search Criteria requires Geographic Info. and at least one of the following : Sensor, Parameter or Data Set ID

Current Search Name NoName

Search Type : ☒ Inventory ☐ Directory ☐ Guide

Campaign/Project List...

Platform/Source List...

Instrument/Sensor List...

Parameter List...

Processing Level List...

Data Set List...

Data Center List...

Text String

Day/Night: ☒ Day ☐ Night ☐ Both

Browse Only Granules: ☒ Yes ☐ No

Number of Granules returned per Data Set

Geographic Area:

Click on the geographic area button for options

Date/Time:

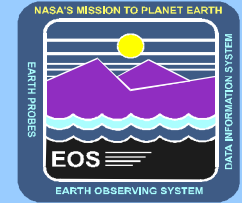
	YYYY-MM-DD	HH:MM:SS
Start Date/Time :	<input type="text"/>	<input type="text"/>
End Date/Time :	<input type="text"/>	<input type="text"/>

Execute Search... Result Status... Save Search Retrieve Search Clear Field Close

- ◆ X/Motif GUI built for the Version 0 Information Management System
- ◆ Predecessor of ECS Client
- ◆ Used with modifications as Release A Client
- ◆ Also being used as the fallback for the Release B B.0 Client
- ◆ Known as B.0 Search and Order Tool or B0SOT
- ◆ Has basic search and order capabilities
- ◆ Integrates with ECS by using the V0-ECS Gateway



Summary



- ✦ **CLS provides an integrated tool suite through which a user can easily access ECS services.**
- ✦ **CLS consists of a number of integrated tools which access the different ECS services.**
- ✦ **Search and order are the primary services offered to the end-user. Other services such as Browse assist the end-user in selecting data.**
- ✦ **The majority of CLS software is implemented for use on the web.**
- ✦ **Integrated access to ECS services is largely supported by JEST, the Java Earth Science Tool.**